

WHAT IS CLAIMED IS:

1. An organic electroluminescence cell comprising:
at least one organic layer;

and a pair of electrodes serving as an anode and a cathode

5 respectively;

said organic layer including a light-emitting layer and
being sandwiched between said pair of electrodes, at least one
of said pair of electrodes being provided as a transparent
electrode, said organic electroluminescence cell being formed
10 to satisfy the expression (1): $B_0 < B_\theta$ in which B_0 is a frontal
luminance value of luminescence radiated from a light extraction
surface, and B_θ is a luminance value of said luminescence at
an angle of from 50° to 70° ; and

a reflection/refraction angle disturbance region being
15 provided substantially without interposition of any air layer
so that the angle of reflection/refraction of said luminescence
is disturbed while said luminescence is output from said
light-emitting layer through said transparent electrode.

20 2. An organic electroluminescence cell according to
claim 1, wherein: one of said anode and said cathode is a
transparent electrode and the other is a reflective electrode;
and said organic electroluminescence cell satisfies the
expression (2): $(0.3/n)\lambda < d < (0.5/n)\lambda$ in which d (nm) is a
25 distance between an approximate center portion of a

hole-electron recombination light-emitting region and said reflective electrode, λ (nm) is a peak wavelength of a fluorescence spectrum of a material used in said light-emitting layer, and n is a refractive index of said organic layer between
5 said light-emitting layer and said reflective electrode.

3. An organic electroluminescence cell according to claim 1, wherein said reflection/refraction angle disturbance region is constituted by a light-diffusing site which contains
10 a transparent material, and a transparent or opaque material different in refractive index from said transparent material and dispersed/distributed in said transparent material.

4. An organic electroluminescence cell according to
15 claim 1, wherein said reflection/refraction angle disturbance region is constituted by a lens structure.

5. An organic electroluminescence cell according to claim 1, wherein said reflection/refraction angle disturbance
20 region is constituted by a protruded and grooved face.

6. An organic electroluminescence cell according to claim 3, further comprising a reflection type polarizing element provided on a light emission side viewed from said
25 reflection/refraction angle disturbance region.

7. An organic electroluminescence cell according to claim 6, wherein said reflection type polarizing element is a reflection type circular polarizing element made of a cholesteric liquid crystal layer.

8. An organic electroluminescence cell according to claim 6, wherein said reflection type polarizing element is a reflection type linear polarizing element made of a multilayer laminate of at least two materials different in refractive index.

9. An organic electroluminescence cell according to claim 6, further comprising an optically compensating layer which has no anisotropy in in-plane refractive index and in which a refractive index in a direction of thickness is higher than said in-plane refractive index.

10. An organic electroluminescence cell according to claim 1, wherein said reflection/refraction angle disturbance region is constituted by a polarizing/scattering site which contains a light-transmissive resin, and micro domains different in birefringence characteristic from said light-transmissive resin and dispersed/distributed in said light-transmissive resin.

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11. An organic electroluminescence cell according to claim 10, wherein said micro domains in said polarizing/scattering site are made of one member selected from the group consisting of a liquid crystal material, a vitrified material with a liquid crystal phase supercooled and solidified, and a material with a liquid crystal phase of polymerizable liquid crystal crosslinked and fixed by an energy beam.

12. An organic electroluminescence cell according to claim 10, wherein said polarizing/scattering site contains a light-transmissive resin, and micro domains which are made of a liquid crystal polymer having a glass transition temperature of not lower than 50°C to exhibit a nematic liquid crystal phase at a lower temperature than the glass transition temperature of said light-transmissive resin and which are dispersed in said light-transmissive resin.

13. An organic electroluminescence cell according to claim 10, wherein: said polarizing/scattering site exhibits refractive index differences Δn_1 , Δn_2 and Δn_3 between said micro domains and the other portions in directions of respective optical axes of said micro domains; and the refractive index difference Δn_1 in an axial direction (Δn_1 direction) as the highest one of the refractive index differences Δn_1 , Δn_2 and Δn_3 is in a range of from 0.03 to 0.5 whereas each of the refractive

index differences Δn_2 and Δn_3 in two axial directions (Δn_2 direction and Δn_3 direction) perpendicular to the Δn_1 direction is not larger than 0.03.

5 14. A planar light source having an organic electroluminescence cell defined in any one of claims 1 to 5.

10 15. A polarizing-type planar light source having an organic electroluminescence cell defined in any one of claims 6 to 13.

16. A display device having a planar light source defined in claim 14.

15 17. A display device having a polarizing-type planar light source defined in claim 15.